Inventor(s): Richard M. Ehrlich Attorney: J. Kurin Phone: (415) 362-3800 Express Mail No: EV 326481719 US Sheet 1 of 12

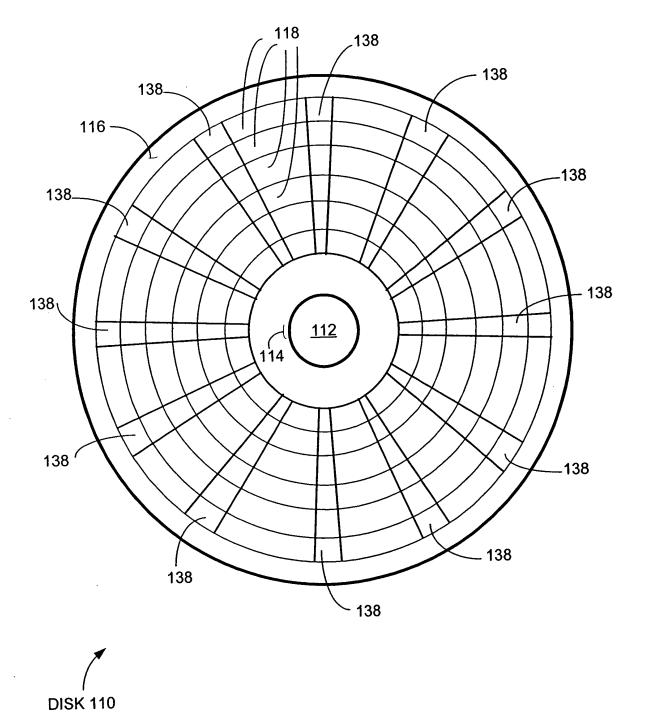
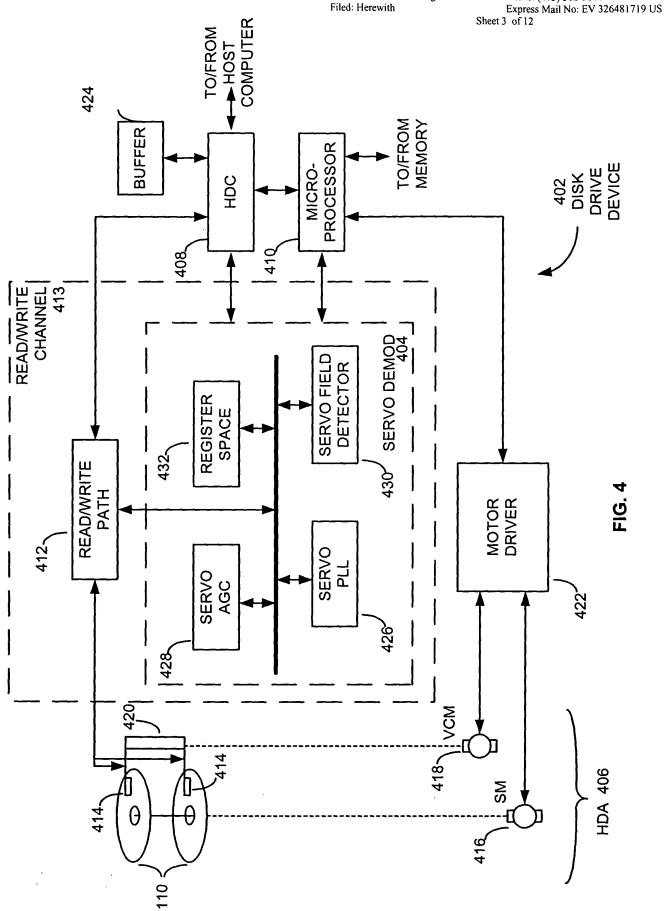


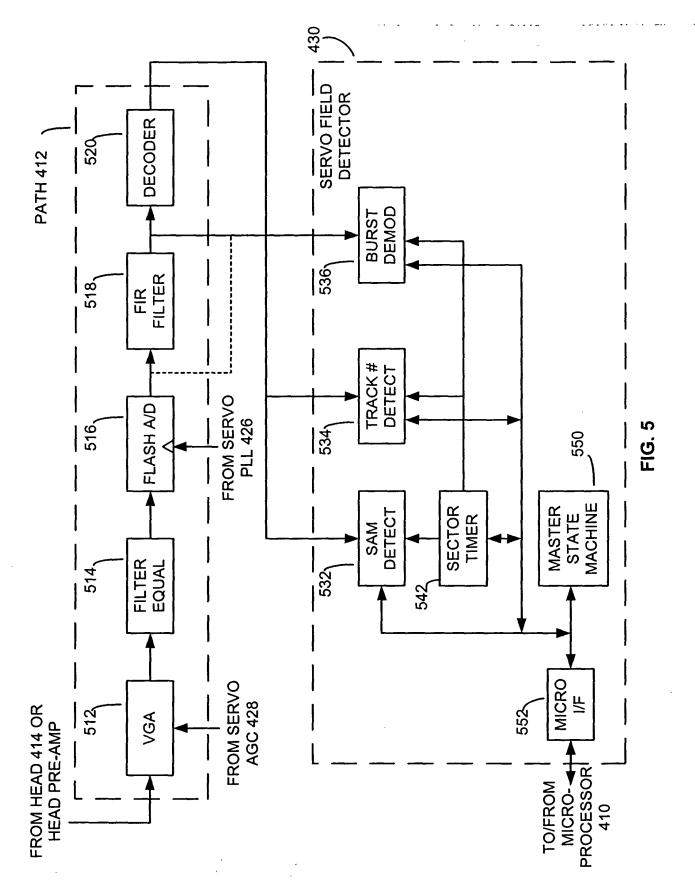
FIG. 1

Docket No.: PANA-01046USF Appl. No.: To be assigned Confirm No.: To be assigned Filed: Herewith Inventor(s): Richard M. Ehrlich Attorney: J. Kurin Phone: (415) 362-3800 Express Mail No: EV 326481719 US Sheet 2 of 12 : SERVO FIELD 138~ C 310 DATA FIELDS $\mathbf{\omega}$ 118 ⋖ TRACK NUMBER FIG. 3 SERVO FIELD FIG. 2 308-138 WEDGE NUMBER DATA FIELDS SERVO ADDRESS MARK 118 PRE-AMBLE SERVO FIELD 302-138~

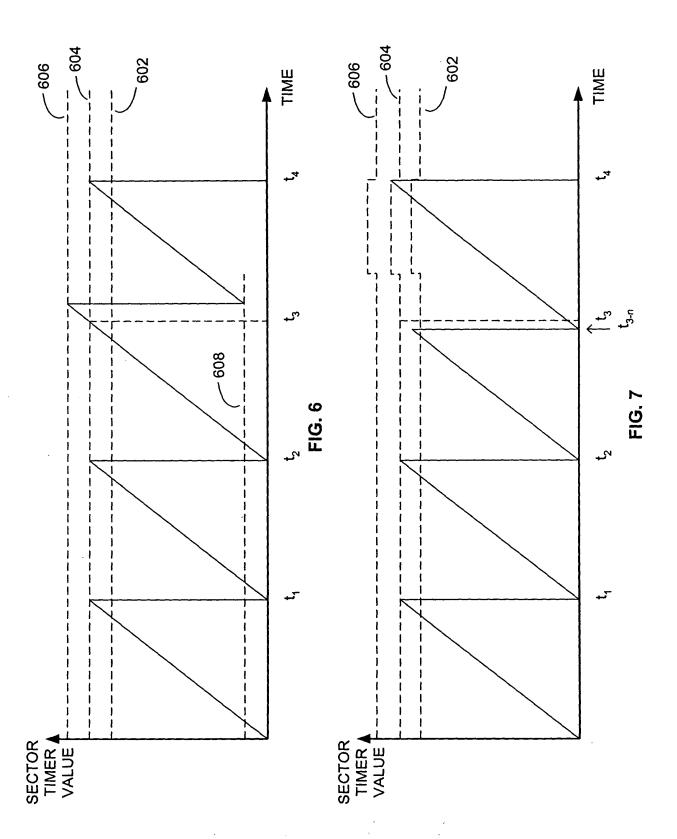
Inventor(s): Richard M. Enriicn Attorney: J. Kurin Phone: (415) 362-3800



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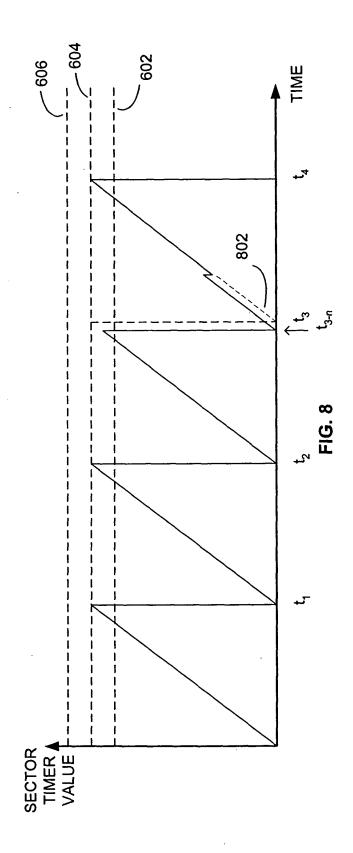


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Phone: (415) 362-3800 Confirm No.: To be assigned Express Mail No: EV 326481719 US Filed: Herewith Sheet 7 of 12 902 determine one or more predicted servo demodulation values for a next servo wedge 904 search for the SAM pattern in the next servo wedge 916-906 perform further servo functions, no taking into account no detection of detect the SAM pattern? the SAM pattern, e.g. free-wheel yes 908 determine one or more actual servo demodulation values for the servo wedge 910 characterize the detection of the SAM pattern as a good SAM detection or a bad SAM detection 918 912 perform further servo functions, no taking into account the bad SAM good SAM detection? detection characterization yes 914 perform further servo functions, taking into account the good SAM detection characterization

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FIG. 9

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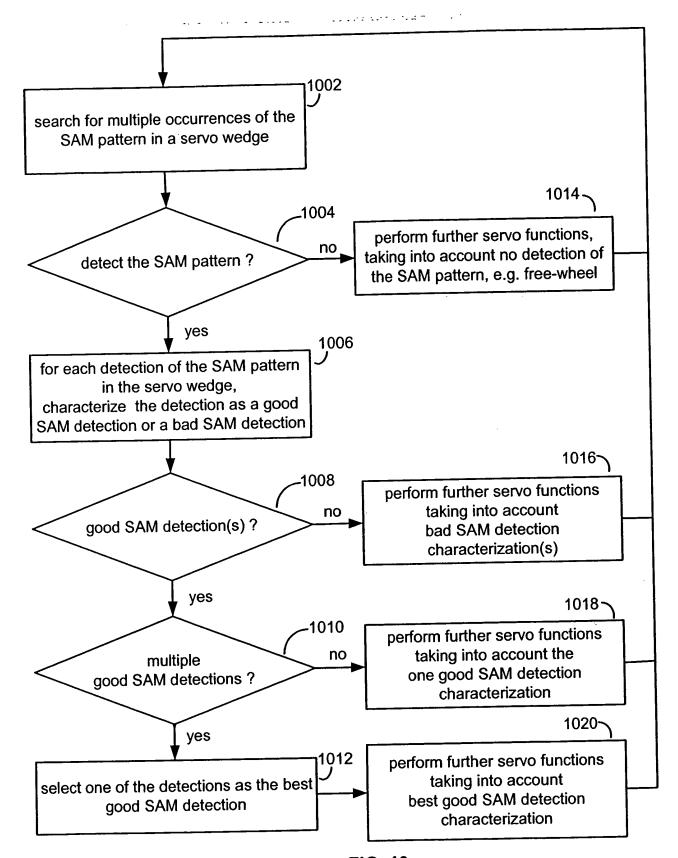


FIG. 10

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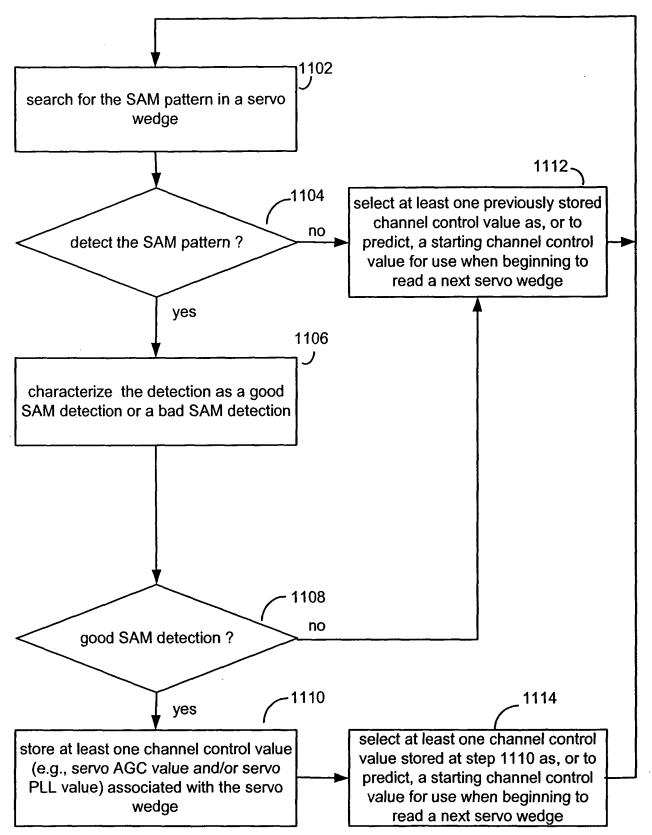


FIG. 11A

Phone: (415) 362-3800 Confirm No.: To be assigned Express Mail No: EV 326481719 US Filed: Herewith Sheet 10 of 12 1122 search for the SAM pattern in a servo wedge 1124 store at least one channel control value (e.g., servo AGC value and/or servo PLL value) associated with the servo wedge 1132 -1126 select at least one previously stored channel control value as, or to no predict, a starting channel control detect the SAM pattern? value for use when beginning to read a next servo wedge yes 1128 characterize the detection as a good SAM detection or a bad SAM detection 1130 no good SAM detection? 1134 yes select at least one channel control value stored at step 1124 as, or to predict, a starting channel control value for use when beginning to

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read a next servo wedge

FIG. 11B

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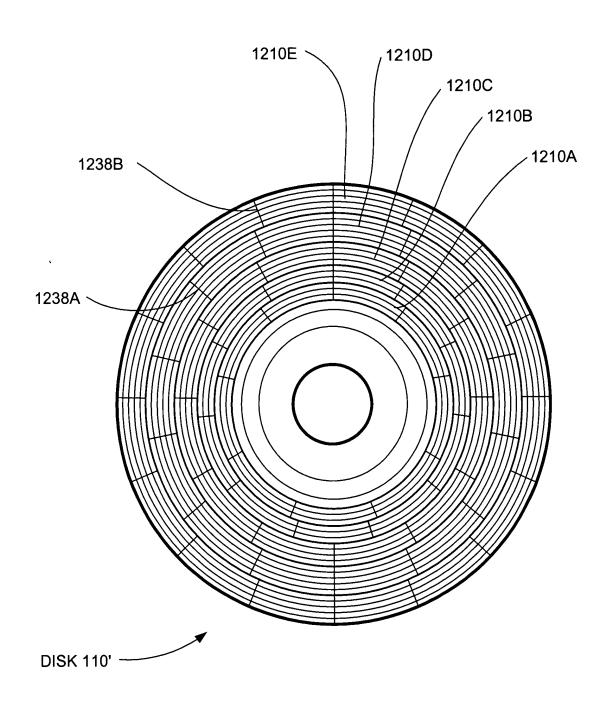


FIG. 12

Appl. No.: To be assigned Confirm No.: To be assigned Filed: Herewith Attorney: J. Kurin
Phone: (415) 362-3800
Express Mail No: EV 326481719 US TO/FROM TO/FROM COMPUTER Sheet 12 of 12 TO/FROM MEMORY BUFFER **PROCESSOR** 1302 DISK DRIVE DEVICE MICRO-HDC 410 READ/WRITE CHANNEL SERVO FIELD DETECTOR REGISTER SPACE READ PATH 432 **READ/WRITE** 439 FIG. 13 PATH MOTOR DRIVER 412B~ SERVO PLL SERVO AGC 412A-428 4187 VCM 420₁ **HDA 406** S⊠

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